

1. **Title**

Access PA Database Project: Innovation and Technology or
How School Libraries lead the way through the Social Construction of
Technology

2. **Author**

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3. **Institution's Name and Description**

The Access Pennsylvania Database is a project of the Pennsylvania Department of Education, Office of Commonwealth Libraries, and Division of School Library Services. Access Pennsylvania is a statewide library union database containing the holdings of approximately 3,018 school, public, special, and academic libraries in Pennsylvania. 100% of school districts in the state currently participate in the Access PA Database. This is the largest database of its kind in North America and contains over 15 million titles and 67 million holdings.

Health Sciences and Libraries Consortium (HSLC) maintains the database and provide technical support and training sessions to all member libraries.

4. **Abstract:**

Access Pennsylvania is a statewide library union database containing the holdings of approximately 3,018 school, public, special and academic libraries in Pennsylvania. In 1986, the first 100 libraries joined the project. Libraries may apply to be considered for the state funding for the retrospective conversion of their library holding records or submit their library holding records in the correct MARC format directly to HSLC. Each library must endorse the Inter Library Loan Code of PA and agree to participate in statewide interlibrary loan and resources sharing.

5. **Introduction:**

In the document, Access Pennsylvania: An Agenda for Knowledge and Information through Libraries, Governor Dick Thornburg outlined the goals of the PA Library Agenda in September of 1984. A Library Planning Committee in 1981, "Under the direction of the State Librarian, Elliot Shelkrot, composed of 95 leading citizens – representing business, industry, labor, education, government and libraries – was convened to examine the problems and potential of libraries of all types."

The findings of this committee contained nineteen recommendations but the three main goals were:

A.) Developing a statewide library card system that will allow all Pennsylvanians to use any publicly-supported library.

B) Expanding the use of technology to more effectively share our library and information resources.

C) Improving, local financial support of public libraries and providing state assistance for the support of libraries in low income communities.

The development of this technological change project and the ability to empower this change is the story of the school librarians of Pennsylvania for the past two decades.

6. Technological Change Description:

The original project called for RFP's from vendors to facilitate the database management and dissemination of information of the holdings of the library records. The vendors offered means to share the MARC records so that the items could be requested from the library that had the item. These RFP's were inspired innovation from various vendors to solve the problem of sharing the database of information. PDE, the School Library Media Division staff was looking for new solutions and new ideas for new technologies but needed them produced at a reasonable cost. The lead innovators for the Access PA Project from PDE were Doris Epler, *Larry Nesbit* and Richard Cassel. The winning vendor presented the product of a CD ROM resource to accommodate the database. This CD would be pressed once a year and disseminated during the Fall Access PA training sessions that each participating library was required to attend. The *IU#29* originally ran the Fall Access PA training sessions. These sessions included training on how to use the CD ROM resources and how to make and fulfill a request. The physical process of shipping books and record keeping was also a part of this fall training. The borrowing of an item was accomplished using a fax machine at each library and specific form was used to make this request. It was expected that participating libraries keep statistics on the lending and borrowing requests. This was prior to the internet was being used in public schools.

The Division also called for RFA (Requests for applications) from all types of libraries to have their library shelf lists, the source of the library holdings information, retrospectively converted into MARC, Machine Readable Format. This prospect was not without a good deal of stress of the part of the librarian. The entire record of the collection would be packed into boxes and shipped to the Retrospective Conversion Vendor and processed and returned at some later date. The libraries were ranked in order by the RFA qualifications to determine which libraries holdings would be converted using State funding during each year funding was available. The conversion costs were .40 per record for each library holding. If a library had 15,000 items the cost would be \$6,000 for the conversion alone. Libraries also needed to commit to sending at least one staff person to attend a yearly training session, and were required to install a fax with a phone

line in the library. The Librarian or library aide/staff also needed to maintain records of the items borrowed and lent. The shelf list cards were turned into Machine Readable Cataloging (MARC) records which could then be utilized by the librarian in an automated library circulation and cataloging system. This is the justifiable reason why the high school librarians joined the project in the first year or two of the project to become the early adopters of Access PA. The appeal of the automated circulation system for librarians was undeniable but costly. Automated circulations systems create a database of library holdings. Through the use of a software program all patrons can be identified, library holdings can be tracked and circulation statistics can be maintained in a fraction of the time of the manual method. The Online Public Access Catalog (OPAC) was the other feature that was exciting for librarians. The cataloging software would allow the updating of one MARC record to create the several subject access points, key words, and title and author access all through one record. Previously, librarians typed each card individually and filed each card into the card catalog. When a holding was removed, the librarian needed to remove each of the cards typed for the original holding to keep the card catalog up to date.

School Libraries needed to purchase a computer as a file server and at least three more stations: one for circulation, one for cataloging and one for the OPAC. This third OPAC piece often came later for most libraries at this early adopter stage and would include three or four stations for patrons to access the new card catalog! These purchases did not include the retrospective conversion of records which would have doubled the price of the process. This ability to reduce the budget by fifty percent for this potential upgrade in services by participation in the Access PA database project was the biggest “tipping factor” for the decision to participate. The support of the district technology staff was essential. This was still a future department for most districts as computers were just starting to play a role in the school environment. It usually meant convincing a principal or a superintendent to spend this money on your library program and not on other district initiatives.

The next major development for this project came as the internet began to be better utilized through a graphical user interface (GUI) like Mosaic or Netscape. The ability to access information via the web soon became a reality for schools.

PDE and the Commonwealth Libraries invested in a project known as POWER Library (Pennsylvania Online World of Electronic Resources). Any school district that had one or more libraries participating in the Access PA project could have the resources provided by the POWER library project for free. The POWER Library is offered by Commonwealth Libraries to all public libraries and to school districts that participate in the Access PA Program.

The Commonwealth Libraries reviews proposals from various vendors to promote online resource database to all Pennsylvania library patrons. Patrons need to visit a public library or have a public library card to access the databases

from home. The Commonwealth Libraries weigh the products with the public library and school library patrons' needs and the budget allocations for that year. The bidding of contracts by online vendors has enabled Pennsylvania patrons to have access to valuable resources at a fair pricing. All of this is provided by state tax dollars to all Pennsylvanians.

The online resources included in this project vary depending upon the contracts with the state but they include some of the same resources that school libraries could barely afford to offer but desperately wanted to use with students. Ebsco databases are expensive and school librarians working with small budgets need to make difficult decisions as to which of the Ebsco resources they offer. This was just one of the several online resources that were available through the POWER Library. This was another incentive to move more school libraries into the database and offered the Early Majority an engaging incentive and a strong piece to negotiate with administrators over the need for this Access PA service to be employed by their district. This process of reviewing the vendors is part of how the POWER library turned to a commercialization of the Access PA database project and influenced the marketplace as to the resources that would be promoted throughout the state.

This project has moved beyond the fax machine. As the number of holdings and MARC records grew, so did the need for a more robust means of storing the data. This is when the database moved to an online database and when HSLC was contracted to begin managing the database. Requests are now generated through an email system which prioritized the requests and moves the request through a queue of responders until the request is filled. This is called the ROTAs. Records of numbers of loaned materials and number of requests are generated by the database and these statistics are now maintained by the Access PA Database and accessible to each librarian as well as PDE and Access PA System Administrators.

The needs of the member libraries are addressed through a network of Access PA library meetings. There are regional directors who facilitate meetings of member libraries. These meetings address needs and concerns of the library staff and address local training needs as well. The regional directors meet quarterly to address concerns at an ISSUES meeting. This creates a forum for librarians to help create change in the development of the database and the services provided by HSLC. "Technology is a product of society, and is influenced by the norms and values of the social system." (Rodgers 148) This has certainly been the case for the Access PA database and the Access PA regional groups. The issues meeting minutes reflect the input and ideas of all member libraries and HSLC's responses to those requests.

The member libraries have suggested that an alternative product for circulation could be developed utilizing the technology of the existing database. This option was considered by HSLC and they contracted with another vendor Innovative to

look at the option. Innovative had been the software vendor for the Update Holdings software that libraries can use to add their new resources to the database. This company then created the Millennium software product that enables users to utilize the Access PA records as the basis for their circulation and Online Public Access Catalog (OPAC). This is another example of how the Access PA database project encouraged commercialization of the library services to promote the growth of technology in the state.

Pennsylvania's commitment and continued funding by the state to its public and school libraries has been exemplified by the Access PA database project. The statewide library card system and the Access PA database have been line items in the governors' budgets for two decades. These two projects which have been two of the top goals for the state library services have maintained or increased their funding levels each year and this shows the acclaimed success of these statewide library programs.

The Access PA database is now searchable not just by librarians or just in a library but from any home computer!

A few schools adopted the system much later than the majority. Elementary libraries who share buildings and have limited staff did not feel they could keep up with requests and already had the benefit of using the POWER library database. They may have finally had the support of a district library coordinator or supervisor who would have helped make it possible for their records to be retrospectively converted and finally placed in a computer circulation system. Or they may have already had the circulation system but did not feel the need to borrow books state wide. There was one school district that was a true hold out and it was not until the librarian in that school district retired in 2004 that the last of the 501 districts in PA was added to the database.

Districts that were slow to adopt often suffered technology challenges with budgeting, or lack of technology support, or lack of clerical support, or the staff were technology laggards themselves. Each of these reasons could have played a role in late adoption. This year there were about 25 elementary school applications to the Access PA database. This means that not all libraries are yet included and Access PA still has room to grow.

The issues committee and the Commonwealth Libraries keep their eyes on the future. As the database continues to socially reconstruct to better meet patron's needs it expands to encompass more special and academic libraries and the focus of technology changes once again to digital recourses. Recently eBooks have been offered through NetLibrary as part of the POWER Library and several special libraries are digitizing their archive collections which make them available statewide. These ideas have all come about due to the social conversations about needs and the current developments in technology that make them possible and financially possible.

7. Conclusions and Summary:

There are three main reasons for the success of Access PA and of this innovation and these reasons are: funding, leadership and librarians. The Governor has continually funded the Statewide Library Card and the Access PA/POWER databases for more than twenty years. The leadership at the State Library Bureau has created the political means to keep Pennsylvania libraries at the forefront of the Governor's agenda. The school, public, academic, special and intermediate unit librarians have found common ground in this project and have worked toward the common goal of resource sharing.

The Access PA quarterly meetings and the Fall Access PA training sessions have been central to the continued success of the statewide database projects. The feeling of community for librarians is perceptible at the fall training meeting where over 100 librarians attend each of the training sessions. Lancaster Lebanon Access Group needs two sessions to assemble the number of librarians in the area. These large numbers of librarians especially the early and late majority adopters provide the stability for of the change and the growth of the Access PA project.

The resources in the POWER library database that have been made accessible to all school districts in the Commonwealth of Pennsylvania and to the patrons of the public libraries have made a wealth of knowledge free. Much in the same way Benjamin Franklin helped start lending libraries in Philadelphia so has the Access PA/POWER library projects brought knowledge to the public.

Teaching how to access the resources available in the POWER library database has become a fantastic reality for school librarians. Librarians can teach how to access authentic, valuable, and valid reference materials in an online environment. A recent study, [Measuring Up to Standards: The Impact of School Library Programs & Information Literacy In Schools](#), shows that higher PSSA reading scores are linked to school library programs that provide the Access Pennsylvania Database, licensed databases, and the Internet/World Wide Web.

What a fantastic time to be a PA Librarian!

8. **Thanks**

Many thanks to the continued support of the Access PA project to Barbara Cole, director of the Bureau of Commonwealth Libraries and John Emerick, director of the Library Services Division. Their united support of PA libraries goes a long way to creating the current success of Access PA and POWER Library!

Many thanks to all PA Librarians for your role in making Access PA and POWER Library a success in each of your libraries!!

9. **About the Author:**

About the Author: Mardy Trusz McGaw, The study of this organizational change as is reflected in the career of one school librarian.

Mardy began her interest in the pursuit of a library career in the Manheim Township School District where great librarians encouraged her interest in Librarianship. Mrs. Sloat and Mrs. Luta

Mardy's training began at Millersville University in the Library Science Program. 1983-1987. during this time Mardy was encouraged by Dr. Marge Tassia to apply for the Capitol Semester Internship for PDE in the summers of 1985 and 1986. It was during these internships that the Access PA project was taking shape!

Mardy was then employed by the Conestoga Valley School District in the fall of 1987 to be the Librarian at Smoketown Elementary School. It was in 1995 that this collection was added to the Access PA database. In 1997 Mardy moved to the Conestoga Valley Middle School and helped complete the shelf card project to send this collection to Brodart for retrospective conversion.

Mardy had been given the opportunity to be a Power Library Trainer and present the power library resources to other librarians in the area through a series of workshops and presentations.

In November of 2001 Mardy, as part of a small group that included John Emerick of SLMS to present Access PA at the AASL Exploratorium. Mardy regularly attends Access PA meetings and the annual fall training sessions.

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